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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,813	04/05/2005	Toshio Narita	042393	6606
38834	7590	09/19/2006	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			WONG, EDNA	
			ART UNIT	PAPER NUMBER
			1753	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/501,813

**Applicant(s)**

NARITA ET AL.

**Examiner**

Edna Wong

**Art Unit**

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply.**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 2 is/are allowed.
- 6) ☒ Claim(s) 3 and 5-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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This is in response to the Amendment dated July 26, 2006. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Response to Arguments***

#### **Specification**

The disclosure has been objected to because of minor informalities.

The objection to the disclosure has been withdrawn in view of Applicants' amendment.

#### **Claim Rejections - 35 USC § 112**

Claims 6 and 7 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejection of claim 6 and 7 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of Applicants' amendment.

#### **Double Patenting**

Claims 1-7 has been rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 6,979,392 B2 (Narita et al.).

The rejection of claims 1-7 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 6,979,392 B2 (Narita et al.) has been withdrawn in view Applicants' terminal disclaimer.

Claim Rejections - 35 USC § 103

I. Claims **1-2 and 6-7** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **JP 09-302496** ('496).

The rejection of claims 1-2 and 6-7 under 35 U.S.C. 103(a) as being unpatentable over JP 09-302496 ('496) has been withdrawn in view of Applicants' remarks.

II. Claims **3-7** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **JP 09-302496** ('496).

With regards to claim 4, the rejection under 35 U.S.C. 103(a) as being unpatentable over JP 09-302496 ('496) has been withdrawn in view of Applicants' amendment. Claim 4 has been cancelled.

With regards to claims 3 and 5-7, the rejection is as applied in the Office Action dated April 27, 2006 and incorporated herein. The rejection has been *maintained* for the following reasons:

Applicants state that according to the present invention, the obtained alloy does not contain Cr. In contrast, JP 09-302496 describes that the composition of the obtained

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alloy contains 2 to 50% Cr (Abstract). Thus, JP 09-302496 does not teach or suggest that "the high-Re-content alloy film consists of Re in the range of 65 to less than 98% by atomic composition and the remainder being at least one of Ni, Fe and Co".

In response, JP '496 teaches the same "performing" step as presently claimed. If the composition is physically the same, it must have the same properties. Products of identical chemical composition can not have mutually exclusive properties (MPEP § 2112.01).

Thus, either JP '496's "performing" step forms a high Re-content alloy film as presently claimed or Applicants' "performing" step forms the chromium-containing coating as disclosed by JP '496.

### ***Response to Amendment***

#### ***Terminal Disclaimer***

The terminal disclaimer filed on August 18, 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of patent no. 6,979,392 B2 has been reviewed and is accepted. The terminal disclaimer has been recorded.

#### ***Allowable Subject Matter***

The following is a statement of reasons for the indication of allowable subject matter:

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Claims 1 and 2 define over the prior art of record because the prior art does not teach or suggest a method for forming a high Re-content alloy film which contains Re at 98% or more by atomic composition, said method comprising the step of performing as presently claimed, esp., wherein the aqueous solution includes at least one organic acid selected from the group consisting of carboxylic acid, hydroxycarboxylic acid and amino acid, in a concentration of greater than 5.0 to 15.0 equivalent to the concentration of all of said metal ions

The prior art does not contain any language that teaches or suggests the above. JP 9-302496 teaches at least one organic acid selected from the group consisting of carboxylic acid, hydroxycarboxylic acid and amino acid, in a concentration of 0.1 to 3 equivalent to the concentration of all of said metal ions (pages 2-3, [0019]). Applicants have shown in Fig. 1 that the content of Re significantly increases as organic acid/metal ions increases from 3 to 5 equivalents. A Re alloy film having a Re content of 98% or more by atomic composition is formed by adding into an electroplating bath an organic acid having at least one functional group selected from the group consisting of a hydroxyl group, a carbonyl group and an amino group, and controlling at a concentration of greater than 5.0 to 15.0 equivalents to the concentration of all of said metal ions. Therefore, a person skilled in the art would not have been motivated to adopt the above conditions, and a prima facie case of obviousness cannot be established.

### **Citations**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Varypaev et al.** ("Electrodeposition of a Rhenium-Chromium Alloy from a Polychromatic Electrolyte", *Prikladnaya Elektrokimiya: Teoriya, Tekhnologiya i Zashchitnye Svoistva Gal'vanicheskikh Pokrytii* (1983), pp. 33-34) is cited to teach electrodeposits of Re-Cr (abstract).

**Berezina et al.** ("Electrodeposition of Nickel-Rhenium Alloy from Acetate Baths", *Zashchita Metallov* (1993), Vol. 29, No. 1, pp. 106-110) is cited to teach the codeposition of Ni and Re (abstract).

**Artamonova et al.** ("Electroplating with a Tungsten-Rhenium-Nickel Alloy", *Gal'vanicheskie Khim. Pokrytiya Dragotsennymi Redk. Met., Mater. Semin.* (1978), pp. 67-72) is cited to teach the electrodeposition of a ternary alloy of Re-Ni-W (abstract).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

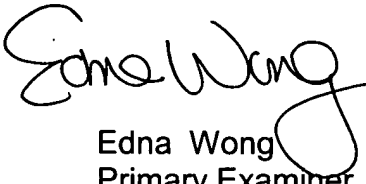
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Edna Wong  
Primary Examiner  
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EW  
September 17, 2006